

Supplementary Appendix for
“Sovereign Credit and the Fate of Leaders: Reassessing
the Democratic Advantage”

Table A1: Bond Spreads, Regime Type and W Failure

	Democracy		Polity	
	(6)	(7)	(8)	(9)
Democracy	1.680*** (0.380)	1.813*** (0.375)		
Polity			0.156*** (0.0456)	0.162*** (0.0490)
$\Delta Spread_{t-1}$	0.122*** (0.0282)	0.114*** (0.0295)	0.127*** (0.0387)	0.130*** (0.0404)
$Dem.X\Delta Spread_{t-1}$	-0.0908*** (0.0218)	-0.0815*** (0.0211)		
$PolityX\Delta Spread_{t-1}$			-0.0122*** (0.00447)	-0.0118*** (0.00437)
$Spread_{t-1}$	-0.0170 (0.0160)	-0.0188 (0.0175)	-0.0153 (0.0167)	-0.0199 (0.0187)
$Growth_{t-1}$	3.602 (2.275)	2.829 (2.461)	3.839 (2.436)	3.934 (2.685)
$GDPPC_{t-1}$	-0.233** (0.0926)	-0.148 (0.104)	-0.316*** (0.117)	-0.267** (0.133)
Competitive Election		0.908*** (0.263)		0.947*** (0.258)
Conflict Scale		-0.000791 (0.000510)		0.0000671* (0.0000367)
Conflict Scale X ln(t)		0.000118* (0.0000693)		
Observations	946	924	937	916
Subjects	237	232	234	230
Failures	127	124	126	124

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Figure A1 indicates the conditional effect of regime type on the credit ratings changes at different ends of the S&P Rating Scale. The figure presents percent change in the hazard of winning coalition failure resulting from a 1-unit downgrade in a country's S&P Rating in democracies and non-democracies for states with an initial credit rating below A- and states equal to or above A- (*Investment Grade*). The capped-lines represent 95% confidence intervals around the simulated estimates resulting from 10,000 draws of betas and the variance-covariance matrix of a Cox model estimating the following equation: $h(t|x) = h_0(t) \exp(\mathbf{X}\boldsymbol{\beta})$ where

$$\begin{aligned} \mathbf{X}\boldsymbol{\beta} = & Dem\beta_1 + \Delta S\&P\beta_2 + InvestGrade\beta_3 \\ & + (Dem * \Delta S\&P)\beta_4 + (Dem * \Delta S\&P * InvestGrade)\beta_5 \\ & + Controls \end{aligned}$$

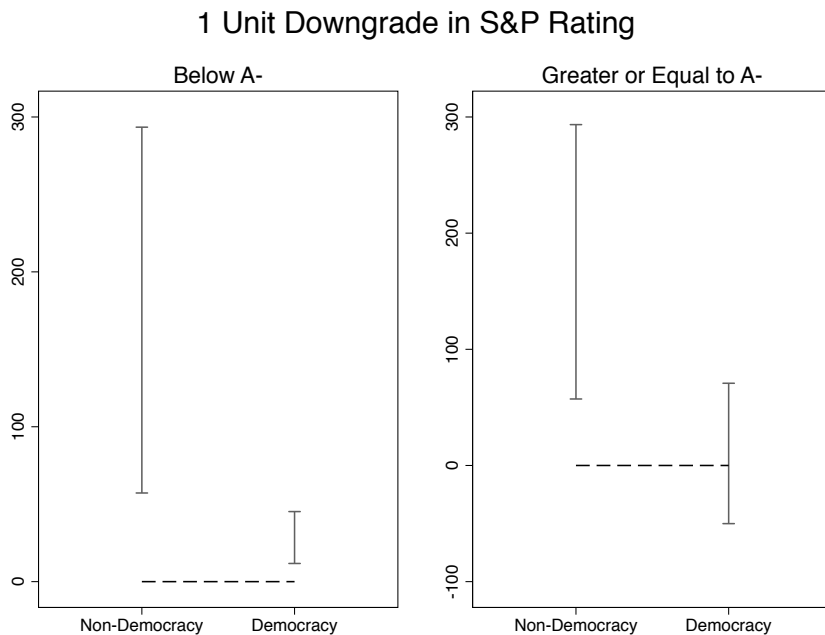


Figure A1: Percent change in the hazard of winning coalition failure resulting from a 1-unit downgrade in a country's S&P Rating in democracies and non-democracies above and below a starting credit rating of A-. In each panel, the capped-lines represent 95% confidence intervals around the simulated estimates resulting from 10,000 draws of betas and the variance-covariance matrix.

Table A2: Cox Models: Negative Change in Creditworthiness, Regime Type and W Failure

	Democracy		Polity	
Democracy	2.472*** (0.816)	2.278*** (0.762)		
Polity			0.213*** (0.0592)	5.834** (2.295)
Negative Change in $S\&P_{t-1}$	-0.942*** (0.256)	-0.933*** (0.255)	-0.905*** (0.177)	-1.286** (0.640)
$DemX\Delta S\&P_{t-1}$	0.699*** (0.267)	0.649** (0.266)		
$PolityX\Delta S\&P_{t-1}$			0.0811*** (0.0244)	0.123 (0.0811)
$S\&P_{t-1}$	-0.0535 (0.0345)	-0.0295 (0.0343)	-0.0725** (0.0354)	-0.0620 (0.0520)
$Growth_{t-1}$	2.766 (2.350)	3.091 (2.513)	2.316 (2.374)	1.342 (2.693)
$GDPpercapita_{t-1,logged}$	0.0466 (0.261)	0.00386 (0.263)	0.0149 (0.268)	-0.321 (0.330)
Competitive Election		1.012*** (0.240)		0.969*** (0.242)
Conflict Scale		0.0000552 (0.0000532)		0.000146* (0.0000786)
$PolityXln(t)$				-0.686** (0.272)
Observations	710	706	705	701
Subjects	196	195	195	194
Failures	100	100	100	100

Robust standard errors in parentheses below beta coefficients

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A3: Cox Models: Career Creditworthiness Change, Regime Type and W Failure

	Democracy		Polity	
Democracy	2.178*** (0.630)	2.041*** (0.619)		
Polity			0.245*** (0.0581)	0.262*** (0.0686)
Career Change in S&P	-0.752*** (0.206)	-0.780*** (0.208)	-0.982*** (0.153)	-1.077*** (0.180)
<i>DemXCareerChange</i>	0.659*** (0.225)	0.691*** (0.234)		
<i>PolityXCareerChange</i>			0.100*** (0.0193)	0.111*** (0.0221)
<i>S&P_{t-1}</i>	-0.0616** (0.0269)	-0.0419 (0.0266)	-0.0803*** (0.0280)	-0.0614** (0.0271)
<i>Growth_{t-1}</i>	0.864 (2.287)	0.995 (2.372)	1.130 (2.262)	1.384 (2.328)
<i>GDPpercapita_{t-1}, logged</i>	0.122 (0.211)	0.0758 (0.211)	0.0115 (0.231)	-0.0388 (0.227)
Competitive Election		1.019*** (0.216)		1.064*** (0.213)
Conflict Scale		0.0000155 (0.0000378)		0.0000212 (0.0000355)
Observations	977	970	970	963
Subjects	268	267	266	265
Failures	145	145	145	145

Robust standard errors in parentheses below beta coefficients

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A4: Selection Effects: Heckman Probit model of W Failure

	S&P Democracy
<i>Winning Coalition Failure (0,1)</i>	
Democracy	0.927*** (0.345)
$\Delta S\&P_{t-1}$	-0.580*** (0.182)
$DemX\Delta S\&P_{t-1}$	0.357* (0.193)
$S\&P_{t-1}$	-0.0415** (0.0203)
$Growth_{t-1}$	3.084 (1.901)
$GDPpercapita_{t-1}, \text{logged}$	0.0850 (0.166)
ln(Tenure)	-0.320*** (0.122)
Constant	0.114 (1.688)
<i>S&P Rated (0,1)</i>	
Polity	0.0181 (0.0111)
$GDPpercapita_{t-1}, \text{logged}$	0.616*** (0.0901)
$Growth_{t-1}$	0.799 (0.681)
ln(US Exports)	0.134*** (0.0293)
Trade Openness	-89.68 (196.9)
Time since last default	0.00499*** (0.00190)
1980's	0.900*** (0.161)
1990's	1.505*** (0.168)
2000's	2.278*** (0.177)
Constant	-9.081*** (0.736)
Observations	5869
ρ	-0.0804

Robust Standard errors clustered by leader in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A5: Potentially Confounding Variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	OECD	Fuel Exports	Aid/GNI	Trade	Debt/GDP	Deficit	Inflation
Democracy	2.50*** (0.75)	2.39*** (0.76)	1.91** (0.82)	2.40*** (0.76)	2.36*** (0.75)	2.92** (1.25)	2.30*** (0.75)
$\Delta ChangeinS\&P_{t-1}$	-0.95*** (0.23)	-0.92*** (0.23)	-1.19*** (0.41)	-0.95*** (0.23)	-0.91*** (0.23)	-1.23*** (0.47)	-0.82*** (0.23)
$DemX\Delta S\&P_{t-1}$	0.71*** (0.24)	0.69*** (0.24)	0.94** (0.43)	0.72*** (0.24)	0.68*** (0.24)	1.09** (0.48)	0.60** (0.24)
$S\&P_{t-1}$	-0.041 (0.039)	-0.057 (0.035)	-0.014 (0.065)	-0.059* (0.033)	-0.028 (0.036)	-0.043 (0.051)	-0.042 (0.036)
$Growth_{t-1}$	3.18 (2.28)	3.34 (2.41)	3.24 (3.09)	3.37 (2.38)	3.21 (2.37)	5.55** (2.56)	4.81** (2.35)
$GDPPC_{t-1}$	0.100 (0.25)	0.062 (0.26)	-0.49 (0.37)	0.043 (0.26)	-0.082 (0.27)	-0.29 (0.35)	0.10 (0.27)
OECD	-0.29 (0.33)						
Fuel Exports		-0.054 (0.31)					
ODA/GNI			-0.19* (0.12)				
Trade Openness				0.080 (0.095)			
$\Delta Trade$				0.10 (0.59)			
$Debt/GDP$					-734.1 (952.2)		
Primary Balance						-2.8e-15 (2.4e-14)	
Inflation							0.031*** (0.0050)
Observations	710	695	258	705	556	328	648
Subjects	197	194	85	196	167	108	184
Failures	100	99	37	100	85	44	94

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

1 Unit Downgrade in S&P Rating

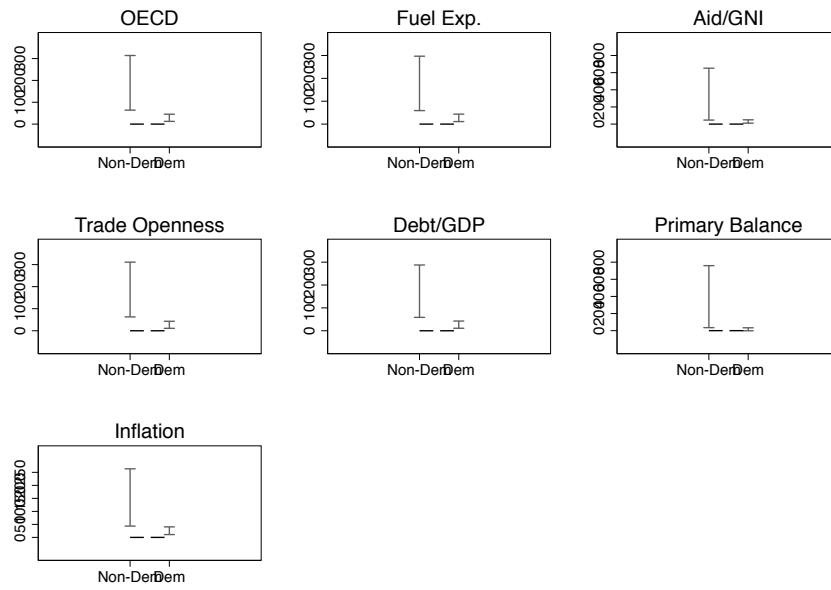


Figure A2: Presents the 95% confidence intervals around the % change in hazard for each model present in Table A4 of the Appendix.

Table A6: Non-Democracy Country Years

Country	Start Year	End Year
Mexico	1994	1999
Peru	1999	2000
Russia	1998	2004
S. Africa	1996	2004
Botswana	2003	2004
Morocco	2001	2004
Tunisia	1999	2004
Egypt	1999	2004
Lebanon	2000	2004
Jordan	1997	2004
Kuwait	1999	2004
Bahrain	2004	2004
Qatar	1998	2004
Oman	1998	2004
Kazakhstan	1998	2004
China	1994	2003
Taiwan	1994	1995
Pakistan	1999	2004
Thailand	1991	1991
Vietnam	2004	2004
Malaysia	1992	2003
Singapore	1994	2004
Indonesia	1994	1998
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